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OLDEST BEE PAPER  
IN AMERICA  
**THE AMERICAN**  
**BEE JOURNAL**  
 ESTABLISHED  
IN 1861

DEVOTED TO SCIENTIFIC BEE-CULTURE AND HONEY PRODUCTION.

ESTABLISHED IN  
1861.

Chicago, Ill., March 5, 1884.

VOL. XX. No. 10.

**THE WEEKLY EDITION**  
OF

**THE AMERICAN**  
**BEE JOURNAL**

PUBLISHED BY

**THOMAS C. NEWMAN,**

EDITOR AND PROPRIETOR.

925 WEST MADISON ST., CHICAGO, ILL.

Weekly, \$2 a year; Monthly, \$1.

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**THOMAS G. NEWMAN,**

925 West Madison Street., Chicago, Ill.

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**Bee Pasturage a Necessity,** by Thomas G. Newman.—Giving advanced views on this important subject, with suggestions what to plant, and when and how: 26 engravings. This is a chapter from "Bees and Honey." Price, 10c.

**Bees in Winter,** with instructions about Chief-Packing Cellars and Bee-Houses, by Thomas G. Newman. This is a chapter from "Bees and Honey." Price, 5c.

**Food Adulteration:** What we eat and should not eat. This book should be in every family, and ought to create a sentiment against adulteration of food products, and demand a law to protect the consumer against the numerous health-destroying adulterations offered as food. 300 pages 50c.

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## Deutsche Buecher, Ueber Bienenzücht.

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**Honig als Nahrung und Medizin**—von Thomas G. Newman. Dieses enthält eine klare darstellung über Bienen und Honig des Alterthums; die Beschaffenheit, Qualität, Quellen und Zubereitung des Honigs für den Handel; Honig als Nahrungsmittel, angebend wie man Honigtuchen, Formküchlein, Puddings, Schaumconfect, Weine, u. s. w. zubereiten kann; ferner Honig als Medizin mit vielen Rezepten. Es ist für den Conumenten bestimmt, und sollte vieltausendfältig über das ganze Land verbreitet werden. Preis 6 Cents.

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THOMAS G. NEWMAN.

925 West Madison St. CHICAGO, ILL.



# Weekly Bee Journal,

DEVOTED TO THE INTERESTS OF THE PRODUCERS OF HONEY.

VOL. XX.

CHICAGO, ILL., MARCH 5, 1884.

No. 10.

## THE AMERICAN BEE JOURNAL

Published every Wednesday, by

THOMAS G. NEWMAN,  
EDITOR AND PROPRIETOR.

### The Report of the National Society.

Concerning this matter, we have the following from Mr. McPherson, who has been mentioned before in connection with the matter. He says:

I see by late issues of the BEE JOURNAL that numerous correspondents have asked about the report of the Toronto Convention, and also Mr. Root's and Dr. Miller's replies. Perhaps an explanation from myself would not come amiss, but first I must thank Dr. Miller for his kind words, and assure him that I shall endeavor to sustain his impressions regarding myself. Representing the *World* of this place, I caused arrangements to be made with one of Toronto's best reporters, to have him report the meeting, for the benefit of the *World* alone, and at a set figure. I had supposed there would have been other reporters there representing other papers, and that the regular minutes would be taken by the secretary. I did not imagine that my reporter was to take the official report of the meeting, nor was I aware that he had been doing so until after the convention was over.

During the second day (I think) my reporter came to me and said that at the rate they were going, it would be worth more than I was paying. Not supposing for a moment that he would "go back" on the arrangement first made, the matter stood, and he finished reporting the meeting. The next day Mr. Jones informed me that a resolution had been passed to have the report published and a copy sent to each member, and then I learned that mine was the official report. I called at the office of the reporter to learn how long he would be in furnishing the report transcribed, and was told that the job would be worth \$100—four times the amount of the first arrangement.

I consulted Mr. Jones, and he called twice to see what he could do. I threatened legal proceedings. The reporter had the matter in his own hands, however, and knew that he held the official report, and, I suppose, thought

we could not get along without it. After a good deal of war-like correspondence, I determined, rather than pay a premium for such unbusiness-like conduct, to let him have the labor he had been at, for his pay. Thus the matter stands. I did not think that it was going to pay me to expend \$100 for the manuscript (nearly \$1.00 per member) and then put it into shape, print and bind the reports and get, perhaps, 25 cents each for my trouble. Besides, I did not wish to encourage that style of doing business. I will endeavor to get the names of the vice-presidents of each State for the association. Kindly excuse my having taken up so much of your space.

Yours very truly,

F. H. MCPHERSON.

Beeton, Ont., Feb. 22, 1884.

Dr. Miller sends us the following in explanation of his connection with the affair:

In reply to Dr. Besse's inquiry, I can only repeat what has been already stated in the BEE JOURNAL (which Mr. Besse had probably not yet seen when he made the inquiry), that, by vote of the society, the publication of the minutes of the North American Bee-Keepers' Society was left in the hands of the old officers, so that the present secretary has nothing to do with it more than any other member of the society.

C. C. MILLER.

Marengo, Ill., Feb. 26, 1884.

A series of "blunders" seem to have made this whole matter very unsatisfactory to all concerned. As it is pretty certain now that there will be no official report, it is quite useless to further agitate the matter. If the list of vice-presidents can be obtained, it may help some, and save that much from the wreck. The "Report" is too stale now to be of much value, and may not be worth the \$100, but beekeepers generally will think that, even it had cost that sum, it should have been promptly published, as ordered by the Society. There were funds enough in the Treasury, and these should have been used to carry out the wishes of the members, as expressed by vote at the meeting, both as regards publishing the official report and procuring the badges.

However, let the matter rest until the next meeting, and then we hope

that the officers will strictly attend to business, and not be led astray with "emotional excitement." The National Society should, in its methodical management, be a pattern to all other societies; but we fear that, so far as the last annual meeting is concerned, it will be hardly so considered by any thoughtful or systematic person.

### The Convention at Davenport, Iowa.

As announced previously, we attended this meeting, and found quite a number of the bee-keepers of Iowa and Illinois present. We have a portion of the proceedings ready for publication, but our columns are too much crowded this week to admit them. While there, we were the guest of the Rev. and Mrs. M. L. Williston and family. Mr. W. is the pastor of the Congregational Church at Davenport, is a reader of the BEE JOURNAL, and is very much interested in bee-culture. Col. McCagg, the president of the society, is a thoroughly wide-awake and progressive bee-keeper and horticulturist, under whose guidance the society has grown from 2 or 3 to over 50 members, representing 70,000 lbs. of honey production; among whom are the Rev. O. Clute, Rev. E. L. Briggs, J. V. Caldwell, J. B. Lindle, C. H. Dibbern, Capt. L. H. Scudder, and many others whose names are familiar to our readers, as will be seen when the Report is published—probably next week.

**Catalogues for 1884.**—The following new Catalogues and Price Lists are received:

E. L. Gould, Btanford, Ont.—44 pages—Bee-Keepers' Supplies.

H. H. Brown, Light Street, Pa.—20 pages—Bees and Apiarian Supplies.

O. Clute, Iowa City, Iowa—2 pages—Italian Bees and Queens, and Class of Students.

J. P. McGregor, Freeland, Mich.—1 page—Hives and Sections.

Hillside Fruit Farm, Palmyra, N. Y.—2 pages—Plants.

### Honey Locusts.

Mr. R. Codd, of Canada, asks about Honey Locusts for honey production, and wants to know if they will prosper as far north as the Dominion, etc.

Perhaps the best way to reply to the query about its adaptability to Canada, will be to quote from a letter from the Hon. L. Wallbridge, then of Belleville, Ont., but now Chief Justice of Manitoba. He says:

"Another tree of great value to the bee-keeper is the honey locust. This tree comes in bloom quite early, and



*Honey Locust Tree.*

is valuable on this account. The bees visit it almost in swarms, and the honey and pollen then brought in gets up the excitement in the hive, and breeding goes on at a rapid pace. Now this is the very thing bee-keepers want. They want strong colonies ready to gather honey when white clover comes in, and I know of no tree or plant which does so much to strengthen the colony early as this locust tree."

The New York *Tribune* says that in the Northern sections of the United States, where the Osage orange is more or less injured by the winter, the honey locust is undoubtedly the most valuable plant for hedging purposes. There is no special culture necessary for it, more than is required for other species, but it needs attention for the first 2 or 3 years to form a thick base. The young hedge should be frequently cultivated and kept clear of grass and weeds all summer, otherwise mice will harbor therein and bark the young plants. In trimming, cut well back for the first 2 or 3 years, bearing in mind there is no difficulty in quickly obtaining the desired height, but it is far more troublesome to induce it to become dense and twiggy.

The best results are obtained from running one strand, or, better still, two strands of barbed wire along the

middle of the hedge, thus preventing the inroads of unruly animals, and that bane of the honest orchardist, boys with thieving propensities. To start, at the commencement, honey locust seeds should be collected in the pods as they fall from the trees in autumn, and placed in a cold exposed position until hard freezing weather, when they can readily be threshed like beans. After cleaning the seeds from the fragments of pods, etc., place in bags and preserve dry until spring. At planting time soak the seeds in warm water until they show signs of germination, when they should be sown in drills like peas, in good, thoroughly pulverized soil. Like the larger portion of our native trees, this species forms more root than top the first year, consequently one-year seedlings are usually rather small for planting in the hedge-row, but they should not be left to remain longer than 2 years, else they will be on the other extreme. The cause of so many poor hedges, however, is neglect in cultivation, and the honey locust of all others will not thrive without care and attention.

The Nebraska *Farmer* gives the following valuable instructions regarding the planting and treatment of honey locust for hedges:

The secret in hedge-growing of any kind, is well-directed care and attention during the first 3 or 4 years, and if this be given to honey locust it will make a hedge every time. The plants must be good ones, vigorous and thrifty—and should be about the same size together, and not plant small and large ones promiscuously. Before setting, make the ground along the line



*Honey Locust Limb—pod and seed.*

rich and mellow. After setting out the row must be cultivated and kept clean until the hedge is matured or finished. Let the plants grow the first year undisturbed, and then cut them down within 3 inches of the ground; the second year, 7 inches from the ground; third year, 12 inches; fourth year, 25 inches; sixth year, 33 inches; and the seventh year, height desired for fence. This takes seven years, but the fence is good after the fourth year.

In view of the increasing destruction of our forests, and the great cost

of fencing material, any substitute for good fences will be eagerly sought after by the thoughtful farmer. Osage orange has been extensively tried and experimented with, but it fails to fill the bill, there being many very objectionable features about it, chief among which are its inability to stand excessive cold winters; but the honey locust is free from this objection. As an attractive hedging nothing can excel it in appearance, and certainly nothing is easier of cultivation. When allowed to grow in tree-form it becomes a beautiful shade tree, and the timber is among the most valuable. For honey-producing it stands among the best, and bee-keepers will do well to alternate the honey locust with linden and tulip tree or poplar, as it comes into bloom before the linden, and is a more certain producer, though not so bountiful. Bee-keepers should liberally ornament their grounds with it, and try its virtues for hedging. The seeds or plants can generally be obtained of nurserymen.

### Local Convention Directory.

1884.	Time and place of Meeting.
March 5.	N. E. Michigan, at Lapeer, Mich. W. Z. Hutchinson, Sec., Rogersville, Mich.
March 20.	Southern Indiana, at Madison, Ind. H. C. White, Sec.
Mar. 29.	Union Association, at Dexter, Iowa. M. E. Darby, Sec., Dexter, Iowa.
April 9.	Lorain Co., at Elvria, O. O. J. Terrell Sec., North Ridgeville, O.
April 18.	Iowa Central, at Winterset, Iowa. J. E. Pryor, Sec.
April 22.	Des Moines Co., at Middleton, Iowa. John Nau, Sec.
April 24.	Western, at Independence, Mo. C. M. Crandall, Sec.
April 24, 25.	Texas State, at McKinney. W. R. Howard, Sec.
May 28.	Will County, at Monee, Ill. P. F. Nelson, Sec.
Oct. 11, 12.	Northern Mich., at Alma, Mich. F. A. Palmer, Sec., McBride, Mich.
Oct. 15, 16.	Northwestern, at Chicago, Ill. W. Z. Hutchinson, Sec.
Dec. 10, 11.	Michigan State, at Lansing. H. D. Cutting, Sec., Clinton, Mich.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—Ed.

The first edition of the "Apiary Register" having been exhausted, we have just issued a new edition, elegantly bound in Russia leather, with a large worker bee and "Apiary Register" in gold on the side. It forms not only a Register of both Queens and Colonies, but has also an Account Book at the back, in which to keep a record of all the receipts and expenditures of the apiary, which will be found exceedingly valuable. We have also reduced the prices, as will be seen on another page.



## CORRESPONDENCE

For the American Bee Journal.

### Priority of Location.

J. E. POND, JR.

What a delightful thing would it be to some poor fellow, who owns a few square rods of land, if he could only have the right of priority, to all the honey secreted on the thousands of acres surrounding him. What a most delicious monopoly would be at once created. All that needs to be done, if I "catch on" to the idea, of at least one apicultural writer to give such an one a moral right at least to control all the honey flora within bee range of his apiary, is simply to be the first one in a given locality to own a colony of bees.

To be sure some one else might object, but no matter for that, he is the first comer, and the honey yield is his by virtue of priority. When he has procured one hive, and by the exercise of good judgment has selected a rich location, and found that the business will pay a satisfactory profit, the law "of advantage in speciality" imbues his mind with a desire at once to enlarge his apiary till he has completely covered his diminutive tract of land with hives, as thickly as it is safe to stand them. As the season rolls on and he finds each colony giving large returns, he views his spoils by a large degree of self-complacency, and says to himself, "I've got a perfect bonanza." Ere long his neighbor, who owns the adjacent territory, ascertains that there is money to be made in keeping bees, and procures a few colonies himself, thinking in the innocence of his heart, that as the flowers are his, he has at least the right to gather a portion of the nectar from them; but he is rudely awakened to the fact that he has no such right (morally at least), because no one has the right by reason of priority to all the honey yielded within an area of five or six miles from the apiary he has established. No. 1 comes over to see No. 2 and says to him, "My dear sir, why do you keep bees and thus spoil my chance of getting rich in the business? Last season I got 200 pounds of honey per colony; this season I shall not average 100 pounds, and all because you are poaching on my manor."

But, says No. 2, "I own all the surrounding territory, and you own scarcely land enough on which to set your hives, why have I not a right to gather nectar from my own flowers?"

"Why, my dear sir," says No. 1, "don't you know that my right of priority (morally at least) prevents you from having any rights to the honey, that I am bound to respect?" And so the conversation goes on, but whether No. 2 is fully satisfied or not remains to be seen.

Is there any sense in a discussion of this kind, and will the persons who

advocate any such doctrine (if any such there are) honestly claim that any right of priority such as indicated above, in reality exists.

I am surprised at times to see the amount of selfishness that is shown by some of our able writers, when the question of honey yields is under consideration, and think of the difference in this regard that exists between our bee-keepers and those across the water. Here the idea seems solely to work for self, and to prevent every one else from engaging in the business; there societies are being formed whose sole object is to teach the best methods to the poorer classes, in order that they may have to add a small revenue from their bees to the stipend they receive for their daily labor. Here the attempt is being made to discourage making bee-culture an auxiliary to other pursuits; there the attempt is being made to urge every one who possibly can, to occupy his leisure moments with labor in his own apiary.

One day we hear the cry of "overstocking," and the claim made that ere long bees will be so thick that they will starve unless sugar syrup is supplied them for food. The next day, farmers and professional men are "pitched into" with great severity, and they are accused of taking the bread out of the poor specialist's mouth. Then the agricultural colleges are "hauled over the coals" for adding bee-culture to their curriculum, and advertisements for students are issued in the same paper by bee-keeping specialists.

Do these college students and professional men injure apiculture as a science or not? Who, I ask, have been the leaders in apicultural improvements? Has it been the specialists whose time is wholly devoted to caring for their crops of honey or the rearing of queens, or has it been the professional men, who have had the time and the desire to experiment in order to determine the value of this or that point, or the best ways and means of procuring comb or extracted honey? Who was it that invented and introduced the movable frame? Mr. Quinby, one of the ablest and most practical bee-keepers of the age, might have done this had he the time to devote to it, but he did not, and the Rev. L. L. Langstroth, one of these same professional men, did have the time and the inclination, and he did it. Who discovered and taught us the theory of parthenogenesis? Dzierzon, another professional man. And so I might go on, but the above examples are sufficient for the point I wish to present. I trust then, in the future, if selfishness does exist among our apiarists, that (if they must exercise it) they will do so in some less harmful manner than in attempting to drive those away from our ranks who really desire to enter them.

Foxboro, Mass.

The Lorain County Bee-Keepers' Association, will meet at Elyria, O., Wednesday, April 9, 1884.

O. J. TERRELL, Sec.  
North Ridgeville, O.

For the American Bee Journal.

### Statistics of the Honey Crop.

WM. MUTH-RASMUSSEN.

Under the above heading Dr. C. C. Miller asks for suggestions on the best plan for collecting the statistics. I will give the plan, which, to my mind, seems the only feasible one. It should be done through county associations. In the first place the committee on statistics should get printed a number of postal card blanks, giving the questions desired to be answered, and also a like number of cards, reading about as follows:

(Date.).....

Dear Sir:

You are hereby requested to call a special meeting of your county bee-keepers' association on or about the ....day of...., if no regular meeting occurs at or shortly previous to that date, for the purpose of collecting statistics for the North American Bee-Keepers' Society, as indicated in the accompanying blank, obtaining from the members present as much as possible information about those not present, and about other bee-keepers in your county, who are not members of your association, also estimating as near as you can such items as you cannot learn definitely; and to forward said blank, properly filled out, to the Vice-President of your State, as soon as possible.

If there is no bee-keepers' association in your county, you are respectfully requested to collect as full as possible statistics with which to fill out the blank, or, if unable to do so personally, to hand these papers to some other bee-keeper in your county, who may be willing to aid the committee in this important work.

The State reports are desired to be in the hands of the committee by the ....of....

Committee on statistics, N. A. B. K. S.  
.....Chairman.

.....Vice-President for.....

Address.....

As many blanks and cards as there are counties in each State or Territory should be forwarded to the respective vice-presidents, also a corresponding number of stamped envelopes, and one stamped and printed envelope, bearing the name and address of the chairman of the committee.

As soon as this outfit is received, the vice-president should forward a blank postal card, addressed to himself, and one of the accompanying cards filled out, signed and addressed in the proper places, both enclosed in one of the stamped envelopes to each secretary, and to any other bee-keeper designed for the work.

On return of the postal cards the vice-president will make out a State report and send it, in the printed envelope, to the chairman of the committee, keeping the county reports filed away for future reference. In each county where there is no association, the vice-president can probably find some enterprising bee-keeper who will take interest enough in the matter to collect tolerably accurate statistics; at any rate the number of

colonies can be learned from the assessor. If not otherwise obtainable, the vice-president may send a self-addressed postal card to the post-master at each county-seat, requesting him to return it with the name and address of the most prominent bee-keeper in his county.

Thus the principal expense for printing and postage will fall upon the National Society, in whose behalf the work is to be done. If any of the outfit is not used up, it can be kept for next year's report, and turned over to the vice-president's successor.

In regard to the failure in obtaining statistics, I will say that I have taken long trips on horseback through the country spending days in going in different directions in order to visit the bee-keepers at their homes, and obtain statistics from their own mouths. I did it at a time when I had leisure, but should not care to repeat the trips every year, and others probably feel the same way. At other times I have sent self-addressed postal card blanks to 20 or 30 bee-keepers, needing only a few plain figures which might be jotted down with a lead pencil right in the post-office, and the card dropped without taking it home at all; and I had the satisfaction (?) of having at most half a dozen returned. The fault lies partly in the apathy of the multitude, each one thinking there will be enough without his individual report, or forgetting, or not caring at all about the matter; partly in putting too much work and expense on a few, however willing they may be to help.

Independence, Cal.

For the American Bee Journal.

### A Bit of Bee Surgery.

DANIEL WHITMER.

Last September, in looking over a number of nuclei to ascertain whether the queens had met the drones, I discovered they carried the drone appendage. In three or four days I again opened the hives to know whether they were laying, and found that all were depositing eggs very nicely and accurately but one, and she still retained the drone appendage. I closed the hive until the following day, when it was opened again and the queen examined, and found to be in the same condition as before.

She was a very fine-looking queen, and an exact duplicate of her mother, whose Royal Highness I very much admired, she being a queen purchased of Dr. Wilson, of Iowa, and as I desired to save the daughter, I concluded to examine the queen two successive days, and, if the drone organ was not yet voided, I would perform a surgical operation, and extract it from the queen.

The colony was again disturbed, and the queen found to be in the same condition. Two days later, the organ was very hard and dry, adhering very closely to the orifice of the queen. I captured her, took her to the house and inside of the screen door, by the aid of my better half, the organ was

extracted with difficulty, with a needle, and the queen was returned to the hive uninjured; the next day, to satisfy my curiosity, I again opened the hive to ascertain the true condition of my patient, and she was found depositing eggs symmetrically. Thus I saved the life of good queen, which otherwise would have been lost. I lost one, once before, by letting her alone. I do not know whether any one else ever tried the experiment or not, but it can be successfully done. My 147 colonies of bees are all right as yet, save one which was queenless. South Bend, Ind., Feb. 21, 1884.

For the American Bee Journal.

### Clipping Queens' Wings.

GEO. E. BOGGS.

Mr. W. H. Stewart, in a recent article on the above subject, requests beekeepers to answer certain questions.

Mr. S.'s argument proves entirely too much, for if any appreciable exercise of the queen's wings were requisite to not simply increase but even perpetuate wing power in the workers, nature's plan would long since have proved abortive, and the honey-bee would ere this have become extinct. If you contrast the few hours' use of the wings of a queen during her long life, with the constant use of the wings of a worker during the greater portion of its short life, they bear no proportion whatever. In comparison, it may be said the queen does not use her wings.

Mr. S.'s argument not only proves too much, but reaches the *reductio ad absurdum* when he proposes to take his queens out of the hives and toss them into the air, and compel them to use their wings more than nature designed. In this he would contend against nature, and would not simply waste his time, but inevitably do harm. All the energies of the queen seem to be concentrated in her reproductive organs. If we carefully consider the great strain put on them, we will not hastily divert them into other channels. If we do so to any appreciable extent, we will have a deterioration not only of the wings but of all the members of the workers.

Let Mr. S. apply his argument to the mandibles, the tongue and the thighs of the queen, and he would have us believe that we are in great danger of soon having workers that will not be able or inclined to make comb or gather honey and pollen.

I am a firm believer in the laws of heredity. I do not understand how laws that we consider established in regard to animal life are apparently violated in the economy of the bee, but it only shows that the Creator is not limited in his methods of working.

As a further illustration, take another fact regarding queen-bees. How strange that the stimulating food which shortens the period of arriving at maturity should lengthen life. It seems to be an established law in animal life that the length of life is in proportion to the period of time during which maturity is at-

tained. With the bee it is entirely different. The queen is born five days earlier, and begins her life work ten days earlier than the worker, and yet the queen lives to be about three years old, whilst a worker, if actively at work, hardly lives sixty days.

Columbia, South Canada.

### N. E. Ohio & N. W. Pa. Convention.

This association held its fifth annual convention at Jefferson, O., on Jan. 16 and 17.

The meeting was called to order at 1 p. m. Pres. E. F. Mason being absent, C. T. Leonard, of Andover, was called to the chair, and the usual annual address had to be dispersed with. A large number of bee-keepers was present, 6 counties in Ohio and Pennsylvania being represented.

After routine business, the reports of standing committees, etc., the members opened the discussion upon the question, whether modern bee-culture is a success financially.

H. W. Hacket believes it is a paying business, if rightly managed. He makes his hives in winter, and gets everything ready before the busy season comes, so he is enabled to give his whole attention to the bees just when they need it. He has a time for every part of his work, and everything is done in time, as time tide and bees wait for no man.

D. Videto said that most of the beekeepers present were farmers like himself, and can fairly estimate profits from this branch of industry only by comparing them with the profits arising from other departments of labor. The speaker compared the amount of money and labor invested in the production of an acre of wheat and other farm crops, with an equal investment in bees, and made a very favorable case for the latter. It is easy enough by division to increase one colony to ten, but among experienced apiculturists, the real question of interest has been to keep all the bees in a hive, and make them spend their strength in the production of honey. If a man really desires to increase the number of his colonies, they will multiply as fast or faster than is good for them, without any help.

The question of keeping bees in connection with other business, drew out some discussion, the general opinion being that it is not advisable to have any other occupation on hand, that will require your attention at any time when the bees need it.

M. E. Mason said a man who takes care of 75 or 100 colonies, making his own hives and foundation, and marketing his honey, will have done a good year's work, and will have no time to devote to any other business.

"The best method of increasing colonies," was passed with but little being said, as most old beekeepers appeared to think that bees would increase fast enough without any "best method," and that he who could successfully prevent increase, would produce the most honey, and consequently the most dollars.

The evening session was opened by an address by Mr. Videto, on bee-



keeping in general. He talked for over an hour in his usual easy and happy style, and was listened to with marked interest.

At the close of Mr. Videto's address, the President called Capt. S. H. Cook to the stand, who, with a few appropriate remarks in behalf of the Association, presented to Mr. V. a beautiful ebony cane with a solid silver head, on which was engraved, "Presented to D. Videto, by the N. E. Ohio, and N. W. Pa. Bee-Keepers' Association."

M. E. Mason had spent much time in making experiments, and had given swarming more study than any subject connected with apiculture. The object in keeping bees is to get money, and honey is the chief reliance for obtaining the desired reward. If bees are permitted to exhaust their strength in swarming, hives and foundation are needed, which cost more money than is received. We must have bees in the hive; we must keep our colonies strong, or the business will be unsatisfactory.

He practiced the following plan to prevent increase last season. He worked 20 colonies in this manner, and is satisfied they gave him 1,000 lbs. more honey than if he had allowed them to swarm, and hived them in the usual way. He hives the first swarm that comes out in the usual way, and for convenience, he will call the hive that this swarm issued from, No. 1; the next swarm, and the hive they issue from, No. 2, etc. When swarm No. 2 comes out, he takes 2 frames of brood from hive No. 1, and puts empty combs or foundation in their place, and destroys all queen cells on the remaining combs, and then hives swarm No. 2 in this hive, No. 1, and gives them a case of empty sections. When No. 3 swarms, hive No. 2 is prepared in like manner to receive them, and thus he continued till the 20 colonies had swarmed, and had only increased one.

Mr. McGonnell said he prevented swarming in an apiary of a hundred colonies by cutting out drone brood and giving plenty of room. He had an increase of only 7 colonies from 100, and that was caused through neglect.

Statistics taken from the members showed 1,069 colonies put into winter quarters in the fall of 1882; 896 of them lived through the winter and spring, and increased to 1,656 colonies in the fall of 1883, and produced 22,388 lbs. of comb honey, 9,755 lbs. of extracted honey, and 140 lbs. of wax. About 75 per cent. of them were packed in chaff or other dry material, or in chaff hives on the summer stands; 10 per cent. were put in cellars, and the rest were without any extra protection. Of those packed in chaff, etc., and in chaff hives, about 16 per cent. were lost during the winter and spring; 22 per cent. of those in cellars died, while 36 per cent. of those without any protection died.

The next annual meeting of the society will be held in Erie, Pa., the second Wednesday and Thursday in January, 1885.

At the election of officers, P. T. Twitchel was made President, C. H.

Coon, Secretary, and N. T. Phelps, Treasurer. Vice Presidents: M. E. Mason, D. Videto, W. S. Stinson, J. McGonnell, S. B. Wheeler, J. P. Sterrett, H. W. Hackett, J. Hatton, F. M. Blanchard, C. L. Payne, H. A. Eastman, G. S. Harvey, B. F. Jenkins, J. S. Barb, H. B. Hammon, H. F. Sager, E. B. Case.

The Association is in a flourishing condition, and this meeting was a success in every sense of the word.

C. H. COON, Sec.

New Lyme, Ohio.

For the American Bee Journal.

### Why Abuse Half-Pound Sections?

W. Z. HUTCHINSON.

Ever since half-pound sections were invented they have been subjected to a running fire of abuse. Everything that could be thought of has been said against them. Supply dealers have been accused of "booming" them from selfish motives. Bee-keepers who did not understand the principles underlying the production of comb honey, have written long articles in which they attempted to prove that not nearly so much honey could be secured in small as in large sections. Bee-keepers have been accused of being too progressive, too restless, with not being satisfied in "letting well enough alone," of creating a demand among consumers for something that they would never have thought of asking for if it had not been brought to their notice, thus compelling bee-keepers, who did not wish to do so, to use small sections or be left behind, when, if all bee-keepers would only place the seal of condemnation upon the "one bite" sections, they would be saved this trouble.

It has also been mentioned that more sections and more foundation would be needed, but why repeat all that has been said against half-pound sections. Of course all that has been said has not been abuse, but many of the arguments brought against them have been so exceedingly transparent that it required not a very penetrating vision to see beneath them an inducement that flowed about as follows: "I am very much afraid that somebody is going to get the start of me."

At our late Michigan State Convention the subject was but lightly touched upon, and when one dealer reported that he could get no more for them than for the pound sections, and another man reported that a certain dealer could find no sale for them, it was certainly interesting to witness the satisfaction that beamed upon many faces, and to listen to such exclamations of delight as, "Good," "I'm glad of it," and "That's all right;" in fact, the convention came just about as near applauding and cheering as it did when Mr. D. A. Jones told how many thousands of five cent packages of extracted honey were sold at one Canadian fair. As Mr. Jones went on and explained how the sale of these small packages led to the sale of larger ones, and so on and

so forth, some of the members were fairly enraptured; they could see the beauties of selling small packages of extracted honey; but half-pound sections—Oh! that was a horse of a different color.

Perhaps extracted honey can be put up for sale in small packages more cheaply than the same thing can be done with comb honey, but if the public is willing to pay for the expense, why this feeling and prejudice against half-pound sections? One bee-keeper said to me: "It just makes me mad to hear folks even talk about half-pound sections," and, in saying this, I fear that he expressed the sentiments of quite a number of bee-keepers.

Now, I have no interest in half-pound sections; have never used them, and do not know as I ever shall, but it makes me "mad" to see people so unreasonably abuse them without even trying them; and that, too, in the face of the fact that some of our leading comb honey producers have demonstrated that, with proper appliances and methods, just as much honey can be obtained when using half-pound as when using pound sections; and the only question is whether enough larger pieces can be obtained to pay for the extra manipulations.

Arguments against half-pound sections, or anything else for that matter, can be listened to with pleasure, but simple abuse and unreasonable prejudice are disgusting.

Rogersville, Mich.

For the American Bee Journal.

### Cedar Valley, Iowa, Convention.

The bee-keepers of Cedar Valley, Iowa, met at Waterloo, Feb. 13 and 14, at the office of J. Moshen; organized by electing C. P. Hunt President, and John Bird Secretary *pro tem*. It was moved by O. O. Poppleton that a committee of three be appointed to draft a constitution and by-laws. O. O. Poppleton, H. O. McElhany, and D. W. Thayer were appointed as the committee. They submitted the usual printed constitution and by-laws with the following amendments:

SEC. 2. Strike out all after the word interests, and the following inserted in its place: Shall discuss such questions as have a practical bearing on bee-keeping.

SEC. 8 was all struck out, and the following adopted instead: No member shall be entitled to the floor longer than 5 minutes in discussion of any question without the consent of the society.

SEC. 11. In the by-laws was changed by striking out from the word office, all the balance of article.

On vote of the convention, the constitution and by-laws as amended were adopted.

On motion it was moved that the President *pro tem* appoint a committee of three to nominate permanent officers. H. O. McElhany, D. W. Thayer, and Geo. Beck were appointed, and the following names were submitted: C. P. Hunt, of Waterloo, for President, and Dr. Jesse Oren, of Ia

Porte, for Vice-President, and O. O. Poppleton as Secretary and Treasurer.

All the above officers were duly elected except O. O. Poppleton, who objected to serve on account of failing eye sight. H. O. McElhany was elected in his place.

The following persons became members:

H. O. McElhany, Brandon,	Iowa.
O. O. Poppleton, Williamstown,	"
D. W. Thayer, Vinton,	"
J. F. Spaulding, Charles City,	"
Geo. Beck, Waterloo,	"
James Ralston, Vinton,	"
A. D. Bennett, Janesville,	"
John Brusk, Waterloo,	"
D. W. Jolla,	"
J. I. Carr,	"
C. P. Hunt,	"
John M. Bennett,	"
H. Van Buren,	"
J. Moshen,	"
I. Hood,	"
O. Hayden,	"
J. F. Messenger,	"
D. M. Diedorff,	"
L. L. Triem, La Porte,	"
H. E. Hubbard,	"
Dr. Jesse Oren,	"
Thos. Tracy, Nashua,	"
John Bird, Bradford,	"
E. E. Sparks, Cedar Falls,	"
A. J. Norris,	"
E. E. Newton,	"
Samuel August, Vinton,	"
J. K. Oren, Brandon,	"

On motion of O. O. Poppleton, the order of discussions should be in the form of written questions handed in by the members to the President and read by him in rotation.

The first question for discussion was: "The most desirable width for sections." It was decided that  $1\frac{1}{2}$  to  $1\frac{3}{4}$  inches are the most desirable.

"What shall we do with our second swarms?" Mr. Spaulding prefers to prevent them from issuing.

Mr. Bennett, Jr. would let them issue and take out all the queen-cells for future use, and return the swarms to the old hive with a laying queen.

"Is it expedient to clip queen's wings?" Several of the members thought it would. L. L. Triem had experienced some loss of some of the most valuable queens he had by the practice. O. O. Poppleton's experience was the reverse from this, which brought out considerable of a discussion both *pro* and *con*. Messrs. Spaulding, Bennett and others were not in favor of the practice.

"Best way to hive swarms." By placing the hive where it is to permanently stand, and carry the bees to it.

"Which kind of honey to produce, extracted or comb?" Messrs. Tracy, Spaulding, Bennett and Triem would raise comb honey. Messrs. Poppleton, McElhany and Morris preferred to produce extracted honey on account of selling out to the wholesale dealers, and the safety of shipping in large packages.

During the discussion of this question, the President asked what extracted honey could be produced at, to be made profitable? Those producing extracted honey thought they could afford to raise honey in this way at from 8 to 10 cents per pound, wholesale. Mr. Bennett, Jr. thinks bees will winter better run for comb honey. Mr. Poppleton thought they would not. Considerable discussion ensued.

"What shall we do with surplus bees?" A. Bennett never has more than he wants. Mr. Spaulding kills all the inferior ones, and keeps the best. Mr. Poppleton does the same.

Mr. J. M. Bennett would advise uniting all the light colonies in the fall.

Adjourned till 7 p. m.

Called to order at 7 p. m., and the first question discussed was, "Which is the most desirable method of wintering—cellar or out-of-doors?" It was decided by the majority of the members that the cellar, with proper conditions, was preferable. O. O. Poppleton gave his method of out-door packing; he uses double-walled hives, packed with timothy chaff, and has success.

Question, "Does it take more honey in the cellar than it does for out-of-doors?" Answered, "Out-of-doors, always."

"Wintering in deep vs. shallow frames." Messrs. Tracy, Poppleton and Hunt were in favor of the deep frames. Messrs. McElhany, Bennett, Sr., Bennett, Jr., and Triem favored shallow frames.

"Is shade essential for bees; if so, what kind, artificial or natural?" Decided by all that it was, and the natural was the most practical.

"Should hives be raised from the ground?" Yes; from 3 to 4 inches, at the back, and 1 to 2 in front.

"The most desirable size of sections for all purposes." Messrs. Spaulding, Triem, Oren and McElhany preferred one-pound sections. Messrs. Tracy, Bennett, Jr., and Hunt used Harbison frames.

Adjourned till 9 a. m.

Called to order at 9 a. m., Feb. 14, and the first business was the selection of the time for the annual meeting; the first Wednesday and Thursday in October, 1884, was designated, and Waterloo was the place chosen.

"Can more than one yard be run successfully?" Mr. Spaulding was the only one present who had worked in this way, and was successful.

"How many bees can be kept in one locality without overstocking a location?" Mr. Triem thought that almost any number could be kept and not be overstocked. Mr. Tracy thought from 1 to 300 colonies, according to the season, with success.

"Best spring management for bees?" Mr. Bennett, Jr. would commence the management as soon as the bees were placed on the summer stands. Bees should have plenty of honey, and he would spread the brood gradually as the weather warms up; encourage the queens to fill the frames with brood as fast as possible, by giving them frames of honey or syrup, and place them in the centre of the brood-nest. Mr. Bird left the packing around the hives until late in the season.

"The best bees for general use." Some thought hybrids were, but the majority preferred pure Italians.

"What is the standard of purity, for Italians?" Three distinct yellow bands for the workers.

"At what age should a queen be superseded?" Mr. Stark said, when she showed signs of failing. Mr. McElhany would kill all the queens at the age of two years, when running for extracted honey.

"Best foundation for general use." Most of the members said the Given,

about 6 to 7 square feet to the pound.

"How to prevent natural swarming?" Give the bees plenty of room in raising comb honey. Those running for extracted honey are not bothered with this.

"Are any here troubled with foul brood?" None.

"Is a portico an advantage to a hive?" The members were about equally divided on this subject.

A vote of thanks was given D. W. Thayer for procuring reduced rates over the different railways; also to the B. C. R. & N. Ry., C. N. W. Ry., and I. C. Ry., for such reduction; also to J. Moshen and the city of Waterloo for the use of rooms occupied by the convention; also to the Logan House for reduced rates.

Adjourned.

H. O. McELHANY, Sec.  
C. P. HUNT, Pres.

For the American Bee Journal

### Home Market for Honey.

D. WHITE.

There are some who have no trouble in disposing of all the honey they can produce; but many cannot sell their honey, especially extracted. When I produced only from 700 to 1,000 lbs. of honey, I could scarcely find enough customers to consume it; but now, with but little exertion, I can dispose of all the honey I can produce, which was 8,000 lbs. in 1882, and 21,000 lbs. in 1883. This was nearly all extracted honey, and nearly all taken at my door by customers, who came with crocks, pails, jugs, and large milk cans in which to carry it away. They come every season in the same way, for I have never sold them honey that will get thin and sour, if kept in damp cellars; nor have I ever sold them honey that was extracted and ripened after extracting (as some tell about). I never allow a pound to be taken away that was not first-class in every respect. We are careful not to put a pound of comb honey on the market unless it is perfect, so far as ripeness and being sealed up is concerned; we will not offer honey with the top-half of comb sealed and the rest unsealed; it shows for itself, deception cannot be practiced with comb honey. When a comb is extracted, like the section I have described, it is trying to deceive the customer who buys such honey, and I admit he is deceived, but in most cases not more than once or twice, for a large majority of customers will say: "It makes my throat smart. I do not like it, and will not buy any more." Some will say it is adulterated. Now such work as this is uncalled for, and I believe any one can build up an immense home trade for extracted honey. All that is required is to have as good an article out of the comb as is sold in the comb. My price for extracted has always been 9 lbs. for a dollar, or 10 cts. a lb. for 50 lbs. or more.

I have 140 colonies on the summer stands, all in chaff hives, except 12 in simplicity hives. They have had several good flights, and all answered



to roll call. I never saw them in better condition in chaff hives. I shall lose 2 or 3 out of those in single-walled hives. Reports are coming in from farmers around here, that they are losing their bees with hives full of honey.

New London, O.

We will organize a bee-keepers' association at the Court House in Franklin, Ind., at 10 a. m., April 5, 1884. All bee-keepers are invited to attend and take part in the organization.

L. R. JACKSON.

Urmeyville, Ind., Feb. 26, 1884.

The annual meeting of the New Jersey and Eastern Bee-keepers' Association, for the election of officers and other business, will be held in the city of New York at Room 24, Cooper Union, beginning Wednesday, March 12, at 10 a. m., and continuing two days.

J. HASBROUCK, Sec.

We have received a pamphlet of 118 pages, entitled "Tea and Coffee: Their Physical, Intellectual, and Moral Effects on the Human System," by Dr. A. Alcott, with notes and additions by Nelson. Price 25 cents. Fowler & Wells Publishers, 753 Broadway, New York.

## SELECTIONS FROM OUR LETTER BOX

### Bees Confined 102 Days.

My bees have been in the cellar 102 days. The temperature was never below 43° or above 45° after they became settled. Feb. 4, diarrhoea appeared in one colony; to-day it is alive, and as quiet as the others. A year ago saw 2 dead and 20 afflicted; with the same preparation for winter, and temperature from 32° to 40°.

C. W. DAYTON—61.

Bradford, Iowa, Feb. 22, 1884.

### That "Improved" Case.

We have tried almost exactly the same arrangement described by Mr. Dibbern on page 133. We made cases in many ways, testing each thoroughly, covering a period of over two years, before adopting the one we previously described in the BEE JOURNAL. Much damage has been done by hastily recommending untried fixtures. We are very sure that if Mr. D. will try 20 or 40 cases, just as we make them, by the side of an equal number of his, he will discard his "improvements" the second year. There is no trouble in getting the sections out of our case. It is stronger, as we make it, than with his tin T, and can be made cheaper. The tins are objectionable on account of bending when handling the cases empty, if they strike against anything. The glass is also very objectionable. The necessitated outer case is more objectionable than all else, besides adding ad-

ditional expense. We wish to use no separators under any consideration. We do not glass our honey, but if we did, we could glass two-thirds of the sections without the use of separators. We do not use  $\frac{1}{8}$  space above the sections, but scant  $\frac{1}{16}$ . We have had no trouble whatever with any variation in the size of sections.

JAMES HEDDON.

Dowagiac, Mich.

### Small Honey Jars.

To-day's mail brings you my price list for 1884. I send you also per express, prepaid, a sample of our dime and  $\frac{1}{2}$  lb. honey jars, which I think, will prove quite an acquisition to the retail honey trade. The honey market is still without life, and our terrible flood had not a bit of beneficial effect on the market. I was fortunate enough to be above the high water mark.

CHAS. F. MUTH.

Cincinnati, O., Feb. 20, 1884.

[These small jars are quite attractive. The illustration shows the "dime jar of honey," and is simply marked



"Pure Honey." The half-pound jar is of the same design, but is marked " $\frac{1}{2}$  pound Pure Honey." If they are not too expensive, they will add greatly to the retail trade in extracted honey.—ED.]

### Old Foundation Freshened.

In answer to many inquiries, we wish to state that foundation from the previous season, that has been kept over winter and has become pale and brittle, can be readily freshened by exposing it for a minute to the sun's rays in warm weather, or better yet, by passing it over steam from a tea kettle or other boiler. It then becomes as malleable and fresh looking as when fresh-made. If it is already fastened in frames, it is superfluous to anneal it thus, as the bees do this same work themselves by their natural heat and moisture, as soon as they take possession of it.

CHAS. DADANT & SON.

Hamilton, Ill.

### Vocabulary of Bee-Keeping.

If improper names and terms are continually allowed to find a place in the bee papers, there will hardly be any change for the better very soon. Beginners and new subscribers naturally adopt such terms as they read, and hand them down to coming generations through their communications to the papers. Would it not be best, that the editors of the respective papers strike out every incorrect term from any communication sent in for publication, and substitute the proper term intended by the writer, before it goes to press? In this way beginners would read nothing but what was right, and the old hands would gradually forget the old and wrong terms.

2. I would like to ask, what is the proper name for the second story of a two-story hive? Here we call it "cap." If that is not correct, we ought to have some similarly brief name for it, as "second story," "upper hive," or "top-box" are too long for every day use, unless generally adopted. WM. MUTH-RASMUSSEN.

Independence, Cal., Feb. 12, 1884.

[It would be well for the Bee Papers to do as suggested; we have been trying to do so, as much as possible, for some years, but until a vocabulary is settled upon, it will be difficult to make such corrections.

2. We know of no better term than "second story;" the other terms are inappropriate and incorrect.—ED.]

### Bees Packed with Clover Chaff.

I have passed through the log gum, fire and brimstone period. I have always tried to keep about 100 colonies over winter; that number would keep me busy in my young days, at swarming time. I am now in my 75th year, but I will not admit that I am an old fogie. I take most of my honey in one-pound sections; extracting is too much work for me. I increase my bees now by dividing them. I winter about one-half of my bees in a house, on Mr. Jones' plan, but I only make the walls 20 inches thick, for this latitude; the other half I winter on the summer stands, with a box to cover, allowing 2 inches of space between the boxes, which I pack with clover chaff; for an entrance for the bees, I cut two pieces of 6-inch spouting and put between the boxes, to keep up the packing from the entrance, which is  $\frac{1}{4}$  of an inch wide and 12 inches long; then I bore 2 half-inch auger-holes, 2 inches above the entrance, to give air, in case of ice. This kind of entrance will give air enough, and will keep out mice, which are very destructive to bees in cold weather. Our honey season ends with the white clover, about July 10. There is an abundance of sweet clover on all of our roadsides, for ten miles square, and has been for the last 60 years; bees gather pollen from it, but no honey. I have been a close observer of bees, and know whereof I write.

JAMES C. WILSON.

New Concord, O.

### A Floating Apiary.

The problem of what to do with a floating apiary was thrust upon me last week by the unprecedented flood in the Ohio river. I can recommend the so-called "long idea" hive as the best in the world for floating. I had about a dozen of them afloat last year, and the bees kept above water, and were uninjured. This year I saved my apiary by floating about 50 colonies on rafts, and confining about the same number in a boom, where they floated four days. A great many bees have been lost in the Ohio Valley, by the flood. I have picked up a number of box hives and a few movable comb hives, but the bees were all dead in them. The water was 5 feet deep in the lower rooms of my dwelling last week. My buildings and fencings are all wrecked; my workshop badly damaged, and the machinery was under water for several days. Words cannot picture the distress among the poorer classes, caused by this flood. The water was over 5 feet higher than ever before known to be.

W. C. PELHAM.  
Maysville, Ky., Feb. 21, 1884.

### Bees Doing Well.

I have 96 colonies of bees in the cellar under my dwelling house. Several of them are only 3 to 4 frame nuclei. The nuclei seems to be wintering as well as the stronger colonies. Some colonies have stores of honey only; some have sugar only, but most of them have both, and the pollen is generally left in. Some have brood. They have been in the cellar 101 days without a flight, and no signs of diarrhoea. The cellar temperature is from 40° to 52°; generally from 46° to 50°. I do not like it lower than 46°. The hives have bottoms, but no tops except single pieces of burlap, and some of these have holes through them. The hives are the 8-frame Langstroth. They are so piled that there are about 3 inches between the tops in one row and the bottoms in the row above. Occasionally we sweep the cellar, and so far, have taken up about a bushel of dead bees. Our hives are dry; no mold in the cellar, except among the dead bees on the cemented floor. The cellar has an underground ventilator of 6-inch tile, and a 6-inch stove-pipe reaching to within 20 inches of the cellar floor, and connecting with the stove-pipe in the room above. IRA ORVIS—96.

Whitby, Ont., Feb. 21, 1884.

### Bee Diarrhoea.

There seems to be a sincere wish to find out if we can the cause of dysentery among bees, especially is this the case as relates to wintering; some endorse the pollen theory, but from my limited experience I am inclined to think that dysentery may be produced by either of the following causes: Sour honey, breeding and eating pollen in confinement, gorging themselves with honey without chance for a flight, and want of proper ventilation; and in this connection I wish to quote a few lines from Langstroth on the

honey bee, page 127: "I examined, last summer, the bees of a new swarm which had been suffocated for want of air, and found their bodies distended with a yellow and noisome substance just as though they had perished from dysentery. A few were still alive, and instead of honey, their bodies were filled with the same disgusting fluid, although the bees had not been shut up more than two hours." Now, how can this be explained on the pollen theory? Is it not best to be careful about endorsing any set theory until we are in possession of a larger amount of facts than we now possess? In the mean time let every bee-keeper be on the lookout to discover the true cause of this fearful disease. J. M. GOODRICH.

South Frankfort, Mich., Feb. 20, 1884.

### Are Bees Taxable in Michigan?

PROF. COOK:—As you are a brother apiarist and scholar, I address you for the purpose of gaining information. If you will tell us, through the BEE JOURNAL, whether bees are taxable in Michigan, and if so, is the whole colony taxable or only queen and hive, and are any number of colonies exempt, you will not only oblige me, but I think many others. I have kept bees about five years, and have never known any to be taxed, in this place, until last year my 42 colonies in Doolittle hives were assessed \$200. I am a farmer and an apiarist on a small scale. A. P. COWAN.

Grattan, Mich.

In reply to Mr. Cowan, I would state that all property not exempted by special act, is liable to taxation. Bees are property, and hence taxable. Few have bees, and many who do, keep so few bees, that they have escaped notice, and so find no place on the assessor's blanks. Therefore, usage has omitted bees. The bee-keeper, however, desires the protection of the law and all the privileges of citizenship; and so there is no reason in justice why his special property should not bear the burdens of taxation. The omission in the past has resulted from an oversight. All personal property not exempted is taxable, and as bees are not specially mentioned, they would be, like all other property, taxed according to the valuation placed on them by the assessor. A. J. COOK.

### Double-Walled Hives.

In the issue of Dec. 19, 1883, of the BEE JOURNAL, Mr. F. M. Cheeney, in speaking of "double-walled hives" for summer use, says: "They are too much like a person putting on an overcoat in July to keep out the heat. The dead-air space between the outer and inner box will be of a higher temperature than the surrounding air, etc." Now, either Mr. Cheeney is mistaken in this matter, or else all the ideas of scientific men in regard to heat and ventilation are entirely wrong. Dead-air is an almost perfect non-conductor of heat and cold. Were it not so, a double-walled house or hive would be colder in winter than a single. If a double-walled hive is a

protection from cold (and there is no doubt on this point), it must also be a protection from heat, and the only objection that has been made to their use that I have seen (save this of Mr. Cheeney) is that they will not warm up as readily in the spring, as a single-walled hive. The object of a double-wall, is to secure evenness of temperature, and thus preserve quietness inside the hive. I do not write this for the purpose of starting a discussion, but to set Mr. C. right on a point which he evidently misapprehends.

J. E. POND, JR.

Foxboro, Mass., Feb. 22, 1883.

### Educate the Customers.

"Why sell extracted for less than comb honey?" This is the inquiry I am confronted with almost daily, and one who put this same question, yesterday, said he always thought that there was some adulteration to cheapen it. Said he: "It looks to me as though pure honey out of the comb is worth more than that in the comb; it must be worth something to take it out of the comb." When I explained it to him as best I could, he said: "Oh, I see now," and I sold him 23 pounds of extracted honey; but he said: "Nine-tenths of the people think the same as I did." Why not get up a circular to scatter among the people, that will make this point clear to them? Let us have something short, but to the point. Then I, for one, would invest and spread them in my neighborhood, and see what would be the result. Even if we use pails, cans, jars, etc., and leave this prejudice in the minds of people, extracted honey will drag along and find slow sale.

S. SMITH.

Neoga, Ill., Feb. 27, 1884.

[We will, as suggested, get up some leaflets on this point, and supply them at 50 cents per 100, with the honey-producers' name and address free, when 200 or more are ordered at one time, and send them to any address by mail postpaid—all provided that enough will be wanted to pay expenses. Who will take them?—ED.]

### Ants' Wings.

J. D. Enas, on page 118, speaking of the queen ant's wings being clipped, asks, "Am I right?" He is right; she does it herself. I have seen her perform the operation more than once. After, I suppose a successful flight to meet the drone ant, I have seen the queen ant alight, crawl a few inches, stop, turn her head around, and with her mandibles, like a pair of scissors, clip one wing and the other close to her body. G. O. GRIST.

North Springfield, Mo.

### Bee Space.

On page 133 of the BEE JOURNAL, I am made to say: Allow  $\frac{1}{8}$  inch bee-space over the sections. This is "too much of a good thing." I intended to say  $\frac{1}{16}$  inch, and think  $\frac{1}{8}$  inch not too small. C. H. DIBBERN.

Milan, Ill., Feb. 27, 1884.



## What and How.

ANSWERS BY

James Heddon, Dowagiac, Mich.

### Economizing Wax.

I have about 2,000 Gallup frames wired, but not nealed. Can I fill them with thin foundation (made on Given press) by the button hook and melted wax process, and be comparatively sure of success if the frames of foundation are first put in the brood apartment 1 or 2 at a time and allowed to be drawn out there? In view of the scarcity of wax, I wish to use the sheets as light as possible, say 12 sheets to the pound.

A. A. E. WILBUR.

Moravia, N. Y., Feb. 22, 1884.

ANSWER.—I think you make a mistake, and perhaps an unprofitable one in using thin foundation in the brood-chamber; another mistake, by using any melted wax to fasten the foundation to the top-bar; another, by inserting sheets of foundation, a few at a time; combs will not be built as perfectly in that way. For my preferred method of using foundation in the brood-chamber, I will refer you to page 348 of last year, and page 91 of this year.

### Queenlessness.

1. What is best to be done with the combs and bees of a queenless colony, during February and March, in Central Ohio?

2. Is it a good plan to remove all unoccupied combs as early in the spring as possible?

I have 82 colonies now, having lost 2 by death, and one with plenty of bees, but I found its queen in front of the hive.

J. R. ROEBUCK.

Burton City, O., Feb. 19, 1884.

ANSWERS.—1. If I had such a colony with plenty of bees, I would unite some weak colony with a good queen with them, if I had such an one; if not, would try to get a queen elsewhere. If there are but few bees in the hive, I would shake them out and lay the combs away.

2. I do not remove unoccupied combs, in weak colonies, unless they are filled with honey, and the colony is too weak to defend the entrance against robber bees. Trouble from moths is practically over here. Finding a queen in front of a hive, does not prove that colony queenless.

### Pure Beeswax.

Herewith I send you samples of comb foundation. Will kindly give your opinion regarding them?

1. Are they pure wax?

2. If adulterated wax is used in the making of them, what is the adulterating constituent?

I am constrained to ask your opinion concerning this comb foundation, because it is so different in appearance to some samples I have received, and

suggests to my mind that it is adulterated in some way. Many bee-keepers who have been supplied with it, find that they cannot work easily with the thin foundation, on account of its being so brittle. If this foundation is made from pure wax, what is the reason of its appearance being so different to that of the American?

BEE-KEEPER IN NEW ZEALAND.

ANSWER.—On examination I believe the foundation to be of pure wax. I forwarded a sample to Chas. Dadant & Son, who are not only good authority on beeswax, but bees without the wax, and they consider it pure. I will give you my opinion of its faults. First, there is a great difference in the pliability of pure beeswax. This foundation was likely made from hard, brittle wax; and secondly, it has now been made so long that it has lost much of the little plasticity it had when new. Besides this, I consider it poor print, as it has too thick a base, and small, hard-pressed sidewalls or lines.

### Diseased Bees.

Will Mr. Heddon tell through the BEE JOURNAL what is the cause of my bees having the front of their hives daubed over? If they have any disease, what shall I use to cure them?

A SUBSCRIBER.

ANSWER.—The cause of your bees daubing the front of your hive is, that the food of which they have been partaking, has so loaded them with fecal matter that they can no longer retain it; not even until they can rise upon the wing. We know of no cure, but we are working at a preventive for this condition of things, which is called bee dysentery.

### Midwinter Report.

In the last week in January, 1883, I examined 51 colonies, all on the summer stands in A. I. Root's chaff hives. The brood frames of 50 of these were covered with one thickness of old sail-cloth, and above these were clover-chaff cushions, filling the upper story completely but loosely, admitting free circulation. Forty-nine colonies were in splendid condition, having plenty of healthy bees and good honey. A late swarm had perished, being queenless. In preparing my colonies for winter, I had unaccountably overlooked one, and this colony had no covering whatever above the brood frames. It was one of my strongest colonies, both in numbers and stores, when the section frames were removed late in the fall, now there was only a handful of bees which showed any life, and they were partly covered by their dead companions, and there was present dysentery in its most malignant form. Had this colony been prepared for winter like the others of my apiary, I can but conclude that they, to-day, would be numbered among my best, and like them would be free from that dreaded malady, dysentery. All the colonies I have lost during the past 6 years by this disease, have perished under the same conditions which

proved so fatal to this fine colony. I am convinced that there are various causes which induce dysentery, and the one most to be feared is a long period of intensely cold weather with insufficient protection. Please answer the following question: Do bees need upward ventilation to secure best results when run for section honey? Between last frame and side of Root's chaff hive there is a space of  $\frac{1}{4}$  inch the whole width of the hive; ought this to be closed when bees are working in the sections?

M. I. TODD.

Wakeman, O., Feb. 11, 1884.

ANSWERS.—1. To those who have never seen dysentery among bees with conditions just opposite to those surrounding the one colony you mention, and found just such neglected colonies with seemingly enough upward-ventilation to freeze them to death, the only ones in the apiary that was free from the disease, your experience would cause them to believe that the open chamber above caused their death. There are many, however, that must know that that was not the cause; but I am forced to believe that in your apiary, this winter, it was the aggravation to the cause of dysentery. I see no other rational way to look at it.

2. I have never been able to discover any advantage in giving upward ventilation during the honey flow. I find it advantageous to have but one thickness of material between the inside and outside of the supers, and that well shaded. An outside cap over all, I find not only expensive to make and manipulate, but a positive damage.

3. The space you speak of will do no harm, provided the bees do not build comb in it, and that will depend upon your system of management and location.

### Position of Frames in the Hive.

Will Mr. James Heddon please answer this question through the BEE JOURNAL: What benefit is there in having the frame to drop below the level of the hive?

FREDERIC ALLEMAND.

Eden, Ont., Feb. 20, 1884.

ANSWER.—I suppose a host of old practical bee-keepers are smiling at this question, and wondering where I can begin and leave off, in answering it. It is something like, why is health preferable to sickness? This I consider the most valuable claim of the now expired Langstroth patent. Mr. L. discovered that bees would glue all pieces of wood together that were not far enough apart for them to pass between them readily. He found that in a space a little less than  $\frac{3}{4}$  inch, bees would build but little comb, and it being sufficiently large for their passage, they would not glue it up. Now, in putting a flat cover on to a hive, if the frames did not drop bee-space below the top of the hive, the liability to crush bees in placing it, would be greatly increased. After it had remained in place sometime it would be a very difficult job to remove it. Some of the frames would stick

to it and come up with the cover, grinding the bees between the combs, giving them a Cyprianic disposition. When the cover was replaced, the bits of glue mismatching their former position, the cover would be slightly raised above its former position, then a lot more glue is added, and so on until there is a pound or less of this interesting commodity about the top of the hive. This bee space can be secured by a sink in the cover, made by nailing  $\frac{3}{8}$  strips around its outer edge. If the frames come flush with the top of the hive, the surplus receptacles would need to be arranged in the same manner. It is preferable to have the sink in the hive, that is, have the frames drop 5-16 below. Much the same trouble with glue is experienced in the use of cloths for summer use. We much object to their use at any time when the bees are gathering.

#### After-Swarms.

On page 422, last year's JOURNAL, Mr. Heddon says, "No, sir, I do not extract to give the queen room, nor cut queen-cells. I have learned better, than that. With proper fixtures and management, there is no necessity for so doing." How does he prevent after-swarms, and what does he do with such, if there is any?

LEVI FATZINGER.

Janesville, Wis., Feb. 18, 1884.

ANSWER.—All I do to prevent after-swarms is to keep the hives well shaded, giving them plenty of room, the same as we do to discourage prime swarms. We have found that as long as we can keep the desire for increase out of the minds of the bees, we get our pay in surplus honey; but when we undertake to physically compel them to remain together, we are losers by so doing, except by the plan given on page 126 of the BEE JOURNAL for 1883. While this method does not prevent after-swarms, it prevents increase of colonies for the season.

#### Bees Robbing.

"Henry, my bees are robbing yours." Early in the morning Henry finds his hive rich in honey, but not a bee in the hive. This was the condition of bees last fall, more so than common, not only colonies that gave swarms and then built up again, but first and after swarms also. Can you give the cause of the above unexpected deficiency in bees? One man said, as the fall was unusually poor for bees, they killed their queen. Is that right? Bees worked lively on catnip this fall, when it was so dry. I think bees would be in much worse condition for winter than they are, had it not been for catnip. A year ago bees went into winter quarters very strong in bees, and formed too much dampness; the strongest ones suffering most; but this fall it is the other way, very short in bees, some but  $\frac{1}{2}$  gallon of bees, or even less. If they come out all right in the spring, then we will cheer the Minnesota-man that dumps one-half of the bees out, when he

carries them into winter quarters. I had  $1\frac{1}{2}$  tons of comb honey this fall; increased too much for the poor fall that followed. I have 46 with slough-grass for wind break on the north, 17 packed in sawdust, 8 packed in chaff all around and above, without caps, and the entrance open, with a 2-inch hole in the bottom-board covered with wire, and straw under all, as last year, which did as well as any in summer. A dozen standing out, and 40, mostly the weak ones, in the bee house; the last named ones are very still at 42°, but easily disturbed. Also 6, box hive department, on a board south of the bee house, with holes in the bottom-board.

E. PICKUP.

Limerick, Ill.

ANSWER.—We could give causes for the condition of things mentioned above, but as there are perhaps several, we fear we may not hit the mark at such a long range. We do not think bees kill their queen on the account of a "poor fall for bees." We think Mr. Pickup knows this.

#### Will Cold Kill Bees?

I have often seen it stated that cold alone will not kill bees. My experience, this winter, leads me to think differently. I left 6 colonies of bees out doors in double-walled chaff or sawdust hives, in order to test them as winter hives. The 6 colonies were as nearly equal as possible. One windy night in January the covers were blown off of two of the hives. Upon examination, a few days ago, the bees were dead, while the bees in the other 4 were all right. The dead colonies had plenty of stores, and were perfectly dry. Now, if the exposure to cold on that windy night did not kill those two colonies, what did?

E. C. CAMPBELL.

Cayuga, Ont., Feb. 19, 1884.

ANSWER.—The statement that cold will not kill bees, of course means when they are enclosed in a hive, and properly clustered so that the inner and outer members of the cluster frequently change places with each other. Of course when the exposure becomes too great, a low temperature causes instant death. As we see when they drop upon the snow, or lay out upon a board during a frosty night. Our great enemy in wintering is dysentery; that's all we care about. I presume the 2 colonies, above referred to, did not have that. Practically, it makes but little difference whether such exposure as you mention kill your bees or not, none of us expect to lose a great many from such casualties.

We intend to organize a bee-keepers' association for Southern Indiana on March 20, 1884, to meet at the Merchants and Manufacturers' Club Rooms, Madison, Ind., at 9:30 a. m. Kentucky bee-keepers are invited to participate.

H. C. WHITE.

The Western Bee-Keepers' Association will meet at Independence, Mo., Thursday, April 24, 1884.

C. M. CRANDALL, Sec.

#### Honey and Beeswax Market.

OFFICE OF AMERICAN BEE JOURNAL,  
Monday, 10 a. m., March 3, 1884.

The following are the latest quotations for honey and beeswax received up to this hour:

##### CINCINNATI.

HONEY—There is no change to note in the honey market. No change in the price of extracted honey, but there is an improvement in the demand. Comb honey is in large supply, and the best in 1 lb. sections brings no more than 16c. a lb. from store. Extracted, 7 $\frac{1}{2}$ ¢ to 10¢.

BEESWAX—Fair demand, and arrivals are fair. It brings 28 $\frac{1}{2}$ ¢ to 32c. on arrival.

CHAS. F. MUTH.

##### NEW YORK.

HONEY—White clover and basswood in 1 and 2 lb. sections, 15 $\frac{1}{2}$ ¢ to 21c. Dark and second quality, 15c.; extracted white clover in kegs and barrels, 9 $\frac{1}{2}$ ¢ to 10c.

BEESWAX—Prime yellow, 34 $\frac{1}{2}$ ¢ to 35c.

H. K. & F. B. THURBER & Co.

##### CHICAGO.

HONEY—Goes off slowly, and prices are lower on sections that are imperfectly filled. The demand seems to be chiefly for lots that are fancy in appearance, and in every way perfect sales are made of 1 lb. sections at 15 $\frac{1}{2}$ ¢ to 20c.; 1 $\frac{1}{2}$  lb. sections, 14 $\frac{1}{2}$ ¢ to 18c.; dark and mixed in color, very slow, at about 12 $\frac{1}{2}$ ¢ to 13c. Extracted honey steady, but limited demand; prices range from 7 $\frac{1}{2}$ ¢ to 10c. per lb.

BEESWAX—Scarce, at 28 $\frac{1}{2}$ ¢ to 35c., according to color and cleanliness.

R. A. BURNETT, 161 South Water St.

##### KANSAS CITY, MO.

HONEY—Same scarcity of choice white 2 lb. sections as reported last week, and a few thousand pounds would be readily taken at 17 to 18c. One pound sections in fair supply, and bring us more at present than 2 lbs. Dark comb very slow sale. Stocks are low on dark extracted, and in fair supply for white. Prices range 8 $\frac{1}{2}$ ¢ to 10c.

BEESWAX—None in this market.

JEROME TWICHELL, 514 Walnut Street.

##### SAN FRANCISCO.

HONEY—Market is quiet, and common qualities difficult to place at anything like satisfactory figures. Fancy qualities are scarce. White to extra white comb, 15 $\frac{1}{2}$ ¢ to 18c.; dark to good, 9 $\frac{1}{2}$ ¢ to 11c.; extracted, choice to extra white, 6 $\frac{1}{2}$ ¢ to 7 $\frac{1}{2}$ ¢; dark and candied, 5 $\frac{1}{2}$ ¢.

BEESWAX—Wholesale, 27 $\frac{1}{2}$ ¢ to 30c.

STEARNS & SMITH, 423 Front Street.

##### ST. LOUIS.

HONEY—Plentiful and dull. Comb 12 $\frac{1}{2}$ ¢ to 16c, and strained and extracted 9 $\frac{1}{2}$ ¢ to 10c. per lb. Top rates for fancy small packages.

BEESWAX—Firm at 33 $\frac{1}{2}$ ¢ to 34c. for choice.

W. T. ANDERSON & Co., 104 N. 3d Street.

##### CLEVELAND.

HONEY—The honey market has been dull with us during the month of January, but the past week it has been better, so that stocks are again reduced. Choice white 1 lb. in good order, sold at 18 cts.; the same quality when broken sold at 16c.; 2 lb. best white, 16 $\frac{1}{2}$ ¢ to 17c.; second quality, no sale. Extracted as usual, not at all wanted in our market.

BEESWAX—In great demand, but no supply; nominally 30c. per lb.

A. C. KENDEL, 115 Ontario Street.

##### BOSTON.

HONEY—Demand light. 1 lb. sections comb honey, 18 $\frac{1}{2}$ ¢ to 21c.; 2 lb. 16 $\frac{1}{2}$ ¢ to 18c. Extracted, 9 $\frac{1}{2}$ ¢ to 11c.

BEESWAX—35c.

BLAKE & RIPLEY, 57 Chatham Street.

The sixth annual convention of Texas bee-keepers will be held at the "Bee Garden" of Judge W. H. Andrews at McKinney, Collin Co., Tex., on April 24 and 25, 1884. A larger number of leading bee masters than ever assembled on a similar occasion in the South, is anticipated.

WM. R. HOWARD, Sec.

Kingston, Tex., Jan. 16, 1884.

Constitutions and By-Laws for local Associations \$2.00 per 100. The name of the Association printed in the blanks for 50 cents extra



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**Examine the Date** following your name on the wrapper label of this paper; it indicates the end of the month to which you have paid your subscription on the BEE JOURNAL.

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When writing to this office on business, our correspondents should not write anything for publication on the same sheet of paper, unless it can be torn apart without interfering with either portion of the letter. The editorial and business departments are separate and distinct, and when the business is mixed up with items for publication it often causes confusion. They may both be sent in one envelope but on separate pieces of paper.

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We carefully mail the BEE JOURNAL to every subscriber, but should any be lost in the mails we will cheerfully send another, if notified before all the edition is exhausted.

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## GETTING UP CLUBS.

To increase the number of readers of the BEE JOURNAL, we believe, will aid progressive bee-culture and help to elevate the pursuit. We, therefore, offer the following premiums for getting up clubs:

While no subscription to the BEE JOURNAL will be taken for less than the regular advertised prices (viz.: Weekly, \$2.00; Monthly, \$1.00),—any one getting up a club of two copies, or more, may select from "OUR BOOK LIST" anything therein named, to the amount of 15 cents for every dollar they send direct to this office, to pay them for the trouble of getting up the club; and these books will be sent, postpaid, to any address desired.

For a club of 3 Weekly or 6 Monthly and \$6.00, we will make an additional present of a Pocket Dictionary, bound in cloth, containing 320 pages.

For a club of 5 Weekly or 10 Monthly, (or a mixed club of both,) with \$10, we will, in addition to the 15 per cent, present a copy of the AMERICAN "POPULAR" DICTIONARY, comprising every word in the English language that enters into speech or writing; it contains 32,000 words and phrases, 670 illustrations and 512 pages; it is nicely bound in cloth, and will be sent by mail, postpaid, to any address desired.

For a club of \$20, for 10 Weeklies, or an equivalent in Monthlies, we will present, besides the 15 per cent. in books, a tested Italian queen, by mail, postpaid.

Subscriptions for two or more years for one person, will count the same as each year for a different person.

For a club of 100 Weekly (or its equivalent in Monthlies), with \$200, we will send a Magnificent Organ worth \$150. See description on page 614 of the Weekly for Nov. 28, 1883.

## Apiary Register—New Edition.

All who intend to be systematic in their work in the apiary, should get a copy and commence to use it. The prices will hereafter be as follows:

For 50 colonies (120 pages).....\$1 00  
 " 100 colonies (220 pages)..... 1 25  
 " 200 colonies (420 pages)..... 1 50

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable ones.

We have received the annual Catalogue of vegetable, flower and grain seeds grown by James H. Gregory, Marblehead, Mass., which has been annually advertised in the BEE JOURNAL for the past 10 years. It is an elegantly-illustrated quarto of 60 pages, and will be sent free to all applicants.

## Honey as Food and Medicine.

A pamphlet of 16 pages giving Recipes for Honey Medicines, all kinds of cooking in which honey is used, and healthful and pleasant beverages.

We have put the price still lower, to encourage bee-keepers to scatter them far and wide. Single copy 5 cents, postpaid; per dozen, 40 cents; per hundred, \$2.50. 500 will be sent postpaid for \$10.00; or 1000 for \$15.00. On orders of 100 or more, we will print, if desired, on the cover-page, "Presented by," etc., (giving the name and address of the bee-keeper who scatters them). This alone will pay him for all his trouble and expense—enabling him to dispose of his honey at home, at a good profit.

Attention is called to the Engraving of the Bee-Hive Factory at Newcomerstown, O., which may be found on another page of this issue of the JOURNAL.

## Bees! Queens! Nuclei!

### INSTRUCTION IN BEE-KEEPING.

**BEES.**—I offer For Sale 100 colonies of Italian Bees, in good, new, well-painted Hives, Gallus Frames, 12 frames to a hive; every comb straight and good; most of the combs built on foundation. One colony, \$9.00; 10 or more colonies, \$8.00 each.

**QUEENS.**—I breed Queens by the best methods, and from the best stock. Queens ready after May 20th. Untested, \$1.00; tested, \$2.00; selected tested, \$3.00.

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**By all Means** send your address on a Postal Card to C. A. FLORY, Hygiene, Colo., and get free a copy of the HOME MIRROR, telling all about a famous honey-producing Plant that everybody can raise as easily as weeds. 10 A11t

## Bee-Keepers, Look at This!

Just what you want to make bee-keeping a pleasure as well as a profit, is the **Acmé Honey Case or Crate.** The principle of this case can be easily applied to any movable comb hive, so as to give free access to lower wide frames or surplus brood frames without removing case or top boxes. After 2 year's trial, I can say for convenience for comb and extracted honey, it is without a rival. For full particulars, address **THOS. GORSUCH.** Gorsuch P. O. Huntingdon Co. Pa. 10 A11t

10 A11t Circulars free.

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We are now ready to Book Orders for  
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Dovetailed Specialty.

Everything fully up with the times, and  
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Send stamp for 32-page Catalogue and Samples.

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A Live Monthly Magazine, devoted exclusively to Bee-Culture. Its regular Correspondents and Assistant Editors are among the most practical and progressive bee-keepers of the age. The well known specialist, James Heddon, of Dowagiac, Mich., will furnish a series of articles running through the whole volume. J. E. Pond, Jr., Foxboro, Mass., will continue his "Hints to beginners." The Question Drawer will be conducted by the editors, whose aim will be to make it of especial value to those yet in the A B C of bee-culture.

**H. SCOVELL, J. E. POND, Jr., Editors.**  
Sample Copies free.

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For the manufacture of  
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1884.

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Write for Circular. **J. T. WILSON,**  
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The Largest Manufacturer of Bee Hives  
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Our capacity now is a **CAR-LOAD** of goods daily. Hives manufactured from soft white pine, and sections from white basswood. Send for our new Illustrated Price List for 1884. It is very important you should have our new list before ordering, as prices are arranged differently from last season.

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1884. 1884.

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Manufacturer of PURE HONEY-COMB FOUNDATION, and dealer in

**Supplies for the Apiary.**

New Circular now ready. Send for it! I pay 35c. cash for good yellow Beeswax, at the depot here.

**HEDDON HONEY CASE,**  
Ready to nail, per 100, \$15.00. Hives  
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We have again increased our capacity for making the "BOSS" ONE-PIECE SECTION, and are now ready to fill orders on short notice. We would advise our customers, and especially **SUPPLY DEALERS**, to

**ORDER EARLY,**  
And not Wait until the Rush Comes.

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**J. FORNCROOK & CO.,**  
48C1f Watertown, Wis., Dec. 1, 1883.

**Pure Italian Bees and Queens!**

Send for Price List to  
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7D8t

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Thirty colonies at \$5.00 each, in lower Langstroth hives, in order on cars.

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**HONEY AND BEESWAX,**

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From April 20th to June 1st. Prices upon application.  
**HENRY ALLEY,**  
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**Bees, Bees! and Eggs, Eggs!**

One to 200 Colonies of Italian Bees  
For Sale.

1 to 10, at \$6.50 each; 10 or more, at \$6.00 each. Also Eggs for hatching from choice stock of tested Queens, etc. White and Brown Leghorns, at \$1.50 per set of 13 Eggs. Send Card for Price List and reference. Address to **WM. LOSSING,**  
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1868. 1884.  
**HEDDON'S**  
COLUMN.



My New Langstroth Hive.

Thanking you for past years' patronage, I solicit what I may justly merit for the coming season. I am led to believe that the goods I offer, and my ways of doing business, give at least an average satisfaction, from the fact that my trade has more than doubled every year since I have dealt in supplies, and that nearly all of my former customers are customers still. True, we have had complaints, but we have more than 50 testimonials of best satisfaction, to every one such complaint.

I believe my Hive is growing in popularity, to a much greater degree, than is the business of bee-keeping. I am now prepared to furnish these hives made up, and in the flat, at very reasonable prices.

Given Comb Foundation, after having been thoroughly tested by many of our most experienced, most successful and most extensive bee-keepers, now stands, at least, second to none. I have on hand a large and choice stock of pure, domestic wax, together with improved facilities for making an article of that Foundation excelled by none.

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I have now made arrangements so that I can again supply you with those nice white Dovetailed Sections,  $4\frac{1}{2} \times 4\frac{1}{2} \times 7$  to the foot, and 8 to the foot, \$7.00 per 1,000 from here. Will be ready to ship on and after March 15th.

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Will receive terms for 1884 on application.

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If you contemplate the purchase of Bees in any shape, tested or untested Queens, it may pay you to send for my

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And be SURE to state whether or not you have my Circular for 1883.

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4A17

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Honey, Foundation, Hives, Sections, and all Apiarian implements, send for Circular to

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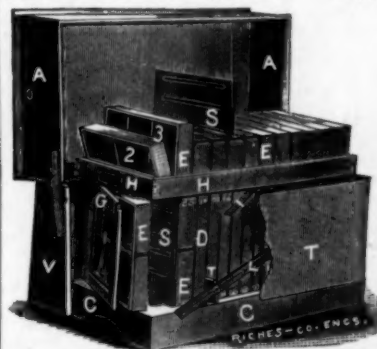
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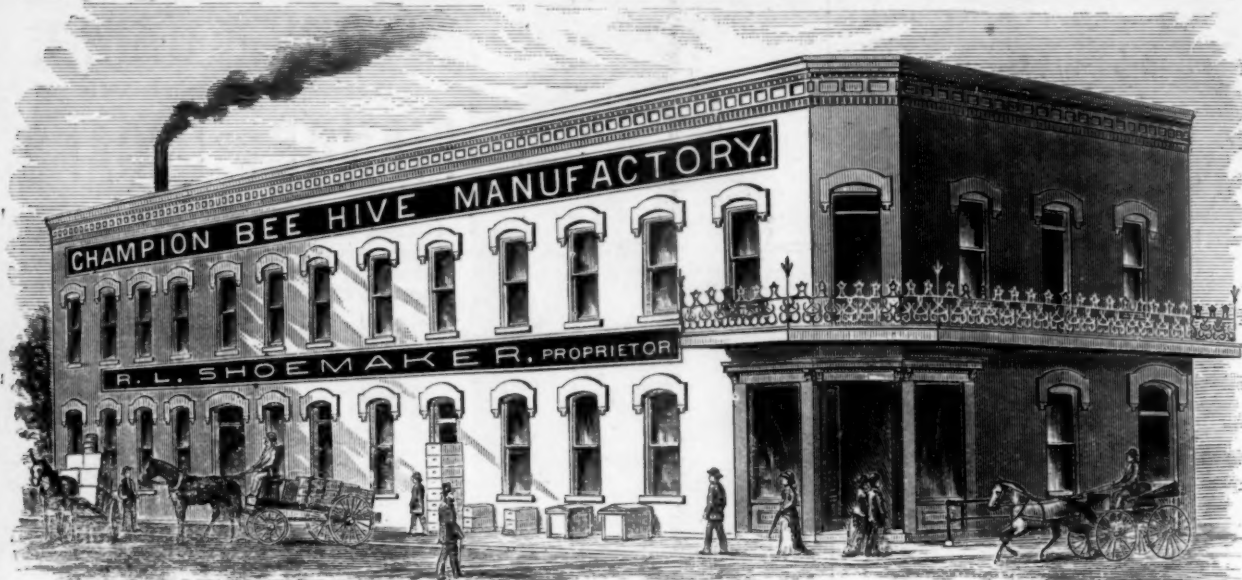
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For further information, send for Circular.

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Sample, by mail, 65c.; by express, 50c. In the flat, per dozen, including one made for model (13 in all) \$3.50. Those who purchase by mail, can get one dozen in the flat by remitting \$2.50 more. Drone Excluder *without Trap*, by mail, 30c.; by express, 20c.; in the flat, not less than one dozen, 15c. each. Send for our 23d annual Circular and Price List of Queens and four races of Bees.  
Bee-Keepers' Handy Book, bound in cloth, by mail, \$1.00.

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**\$66** a week at home. \$5.00 outfit free. Pay absolutely sure. No risk. Capital not required. Reader, if you want business at which persons of either sex, young or old, can make great pay all the time they work, with absolute certainty, write for particulars to H. HALLETT & CO., Portland, Maine.  
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10C1t MAZEPPA, Wabasha Co. MINN.

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Dear Madame:—We have made about 38,000 lbs. of foundation on your mills this year, and the foundation has given universal satisfaction; so much so, that several manufacturers have stopped manufacturing to supply their customers with our foundation. We have also manufactured about 10,000 lbs. of thin foundation on the Vandervort machine for surplus boxes, and it has been equally a success, but for brood chamber foundation, yours is still unexcelled.

Yours,

Hamilton, Ill., Dec. 10, 1883.

CHAS. DADANT & SON.

MRS. FRANCES DUNHAM, De Pere, Wis.

Dear Madame:—I have made over 100,000 lbs. of foundation on one of your machines, and would not now take double the price I paid for it.

Yours very truly,

Beeton, Ont., Dec. 10, 1883.

D. A. JONES.

MRS. FRANCES DUNHAM:

All prefer the foundation I manufacture on one of your mills, to that made on any other machine. I have no difficulty in rolling it from 10 to 12 feet to the pound for sections.

Yours respectfully,

J. G. WHITTEN.

MRS. FRANCES DUNHAM:

After using one of your foundation mills for the past 3 years, we can't say too much in its favor. And for brood foundation, it stands head and shoulders above all.

Kenton, Ohio, Dec. 29, 1883.

Yours, SMITH & SMITH.

MRS. FRANCES DUNHAM:

I made all brood on Dunham mill, and that I believed it by far the best for that purpose, and as further proof, instance the testimony of E. Kretchmer, of Coburg, Iowa, and L. C. Root & Bro., of Mohawk, N. Y. Messrs. Root & Bro. have only used brood foundation of me, and in a later communication say: "It (our foundation) gave the best results of any tried." I write this that you may have fair play, which is to me always a jewel. You are at liberty to publish this. Yours truly, T. L. VONDORN.

Omaha, Neb., Jan. 18, 1884.

Send for description and Price List to

FRANCES DUNHAM, De Pere, Wis.

2B1f 6D1t



My Vegetable and Flower Seed Catalogue for 1884, the result of thirty years' experience as a Seed Grower, will be sent free to all who apply. All my Seed is warranted to be fresh and true to name, so far that should it prove otherwise, I agree to refill orders gratis. My collection of vegetable Seed, one of the most extensive to be found in any American Catalogue, is a large part of it of my own growing. As the original introducer of Eclipse Beet, Burbank Potatoes, Marblehead Early Corn, the Hubbard Squash, and scores of other new Vegetables, I invite the patronage of the public. In the gardens and on the farms of those who plant my seed will be found my best advertisement.

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**WAX** Worked on Given Press by the lb., 15c. a lb.; for 4 to 6 ft. to lb., 18c. a lb.; for 6 to 8 ft. to lb., on shares for 2-3. 1 cent a lb. for cleaning, 10 per cent. off on 50 lbs., 20 per cent. off on 100 lbs. or more; 33c. a lb. I pay for clean yellow wax. In sending wax, prepay freight, or express. Cash required when foundation is finished. A. J. NORRIS, Cedar Falls, Iowa.  
10C3t

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